

IN THE UNITED STATES DISTRICT COURT FOR THE
NORTHERN DISTRICT OF OKLAHOMA

W. A. DREW EDMONDSON, in his)
capacity as ATTORNEY GENERAL)
OF THE STATE OF OKLAHOMA and)
OKLAHOMA SECRETARY OF THE)
ENVIRONMENT C. MILES TOLBERT,)
in his capacity as the)
TRUSTEE FOR NATURAL RESOURCES)
FOR THE STATE OF OKLAHOMA,)

Plaintiff,)

vs.)

) 4:05-CV-00329-TCK-SAJ

TYSON FOODS, INC., et al,)

Defendants.)

VOLUME II OF THE VIDEOTAPED
DEPOSITION OF ROGER OLSEN, PhD, produced as a
witness on behalf of the Defendants in the above
styled and numbered cause, taken on the 11th day of
September, 2008, in the City of Tulsa, County of
Tulsa, State of Oklahoma, before me, Lisa A.
Steinmeyer, a Certified Shorthand Reporter, duly
certified under and by virtue of the laws of the
State of Oklahoma.

TULSA FREELANCE REPORTERS
918-587-2878



<p>1 that you've expressed in your expert report?</p> <p>2 A He had the expertise in the programs to run</p> <p>3 the statistical analysis. I worked with him and</p> <p>4 directed his work to actually do the statistical</p> <p>5 analysis. 08:33AM</p> <p>6 Q Mr. Chappell actually ran the Sysstat software</p> <p>7 that computed the Principal Component 1 and 2 scores</p> <p>8 that you interpreted; is that right?</p> <p>9 A That's correct.</p> <p>10 Q Okay. Did Mr. Chappell run all of the PCA 08:33AM</p> <p>11 analysis that you have referred to or consulted in</p> <p>12 connection with your work in this case?</p> <p>13 MR. PAGE: Object to the form.</p> <p>14 A He did all the runs in this that are produced</p> <p>15 and that were done for my expert report. 08:33AM</p> <p>16 Q Okay. Did Mr. Chappell -- I'm sorry. Strike</p> <p>17 that. Were there any prior runs that are not</p> <p>18 referenced in your report or subsequent runs of the</p> <p>19 principal component analysis that you yourself</p> <p>20 completed? 08:34AM</p> <p>21 A Yes. I did some last year.</p> <p>22 Q Okay.</p> <p>23 A It was -- we talked about in the preliminary</p> <p>24 injunction hearing and, I mean, in the -- in my</p> <p>25 deposition at that time. 08:34AM</p> <p style="text-align: center;">301</p>	<p>1 Q Okay. So tell me about these two other times,</p> <p>2 Dr. Olsen, that you ran Sysstat yourself to compute</p> <p>3 principal component scores in other cases or</p> <p>4 projects.</p> <p>5 A I'd have to go back and recollect. I know 08:36AM</p> <p>6 that we were doing some statistical training. I</p> <p>7 think Rick and I were doing that training together</p> <p>8 and we were kind of trading off who was doing some</p> <p>9 of the runs and things, and I think that was -- I</p> <p>10 forget what data that was on. 08:36AM</p> <p>11 Q Who were you training?</p> <p>12 A We did internal training and we did some</p> <p>13 training with several agencies. I think this was</p> <p>14 for internal training.</p> <p>15 Q You did that with the assistance of Mr. 08:36AM</p> <p>16 Chappell; is that right?</p> <p>17 A Yes, uh-huh.</p> <p>18 Q Is there any instance where you have run the</p> <p>19 principal component analysis software, Sysstat,</p> <p>20 yourself and computed scores prior to this case 08:36AM</p> <p>21 without the assistance of Mr. Chappell?</p> <p>22 A Well, yeah, I've done it with other people,</p> <p>23 just not Dr. Chappell, but usually I consult with</p> <p>24 someone to make sure that, you know, I'm running it</p> <p>25 right and everything or checking their data or their 08:37AM</p> <p style="text-align: center;">303</p>
<p>1 Q So if I understand correctly, Dr. Olsen, you</p> <p>2 were actually yourself running the Sysstat software</p> <p>3 computing principal component scores up until the</p> <p>4 preliminary injunction, but since that time Rick</p> <p>5 Chappell has been running the principal component 08:34AM</p> <p>6 analysis and computing the principal component</p> <p>7 scores?</p> <p>8 A No. I'm sorry if I confused you. You asked</p> <p>9 me if I had done any, and I had done some few runs,</p> <p>10 you know, just -- he wasn't around to do it, so I 08:34AM</p> <p>11 went ahead and did some runs, but Rick Chappell has</p> <p>12 been doing by far, even associated with the</p> <p>13 preliminary injunction, most of the runs.</p> <p>14 Q Okay. Prior to your work in this case, Dr.</p> <p>15 Olsen, had you ever run Sysstat and computed 08:35AM</p> <p>16 principal component scores before?</p> <p>17 A Yes, and I directed other -- on occasions</p> <p>18 other people to do those for me.</p> <p>19 Q How many times have you run the software</p> <p>20 yourself prior to this case? 08:35AM</p> <p>21 A Oh, mostly I directed people. Probably just a</p> <p>22 couple other times that I actually did a few runs</p> <p>23 for PC1 and PC -- for principal component. I used</p> <p>24 Sysstat a lot of other times over the years, but</p> <p>25 probably one or two other times. 08:35AM</p> <p style="text-align: center;">302</p>	<p>1 runs.</p> <p>2 Q Dr. Olsen, prior to your work in this case,</p> <p>3 have you ever been qualified as an expert witness to</p> <p>4 offer a source opinion based upon a principal</p> <p>5 component analysis? 08:37AM</p> <p>6 A I've been qualified many times to offer source</p> <p>7 opinions. I'm trying to -- and we have used PC,</p> <p>8 principal component, and other statistical analysis</p> <p>9 in those source identifications. I don't think I've</p> <p>10 ever been asked that specific question related to 08:37AM</p> <p>11 statistics and PC. Usually I don't make it that --</p> <p>12 when they qualify you, they don't make it that, that</p> <p>13 limited as, you know, an expert in this particular</p> <p>14 area. They usually say source identification by</p> <p>15 using statistical method, other methods, you know, 08:38AM</p> <p>16 weight of evidence, similar to what I did here. So</p> <p>17 I'm trying to think. The one we did in Midvale.</p> <p>18 Q How do you spell Midvale?</p> <p>19 A M-I-D-V-A-L-E, Sharon Steel, Midvale, for the</p> <p>20 Department of Justice, we used principal component 08:38AM</p> <p>21 analysis but that settled. That settled before</p> <p>22 trial, but I did do depositions, so --</p> <p>23 Q You didn't testify in court, though?</p> <p>24 A Yes, but I gave a deposition, so I don't know</p> <p>25 if that qualifies you as an expert, and talked about 08:39AM</p> <p style="text-align: center;">304</p>

3 (Pages 301 to 304)

TULSA FREELANCE REPORTERS
918-587-2878

1	those are used for or coefficient of determination		1	A No, but he's a check on what we did.	
2	is.		2	Q Did you include anything in your expert report	
3	Q Okay. Can you shed any light, Dr. Olsen, on		3	that is the work product or analysis of Mr. Loftis?	
4	how a CD scatter plot would indicate that retaining		4	A No, I did not.	
5	a certain number of principal components is	05:41PM	5	MR. GEORGE: I am through and will pass the	05:43PM
6	sufficient?		6	witness.	
7	A No.		7	MR. PAGE: Since I'm the only one left --	
8	Q Dr. Olsen, Mr. Chappell suggested that you		8	MR. GEORGE: Anybody on the phone have a	
9	consider applying this same approach to your		9	question or two? Do we have anyone left on the	
10	principal component analysis for this case in his	05:41PM	10	phone?	05:44PM
11	E-mail. Did you do that?		11	MR. PAGE: Well, since I'm the only one	
12	MR. PAGE: Object to the form.		12	left, I have no cross examination at this time. So	
13	A He implied we should do it. He said I'm not		13	I'll just state for the Record that Dr. Olsen will	
14	sure we want to go to this level, so he didn't		14	read and sign.	
15	specifically suggest that we do it. I'm also not	05:41PM	15	MR. McDANIEL: Can I just make a statement,	05:44PM
16	sure whether it's applicable to our purposes. Maybe		16	one statement for the Record that's not even	
17	we want to discuss this with Jim.		17	necessary that it be on the deposition Record, but	
18	Q Well, did you discuss it with Jim?		18	we've learned yesterday that there are persons who	
19	A I think we did.		19	have authored parts of Dr. Olsen's report and, of	
20	Q Okay. Did you implement this exercise?	05:41PM	20	course, we reserve the right to pursue those we have	05:44PM
21	A No. We decided it wasn't necessary based on		21	not deposed, but a couple of the people identified	
22	our graphical production of the screen plots that we		22	we've already deposed, and it was not known to us at	
23	added to our analysis.		23	the time of their depositions that they also	
24	Q Dr. Olsen, did you or Mr. Chappell or anyone		24	authored part of this report so we certainly reserve	
25	working for the State in connection with this	05:42PM	25	the right to recall those individuals to examine	05:45PM
573			575		
1	principal component analysis do anything to test or		1	them with regard to their authorship in this report.	
2	evaluate whether or not your principal component		2	MR. PAGE: I don't have anything more to	
3	analysis was reliably reproducing data?		3	say.	
4	A Again, I don't know for sure how to do that		4	VIDEOGRAPHER: This concludes the	
5	and exactly what Jim Loftis did in his evaluation of	05:42PM	5	deposition of Roger Olsen. We are now off the	05:45PM
6	it. I don't know if he did that or not.		6	Record. The time is 4:45 p.m. -- 5:45 p.m.	
7	Q Well, Dr. Olsen, you've referred to Jim		7	(Whereupon, the deposition was	
8	Loftis. Who is Jim Loftis?		8	concluded at 5:45 p.m.)	
9	A He's a professor at Colorado State University.		9		
10	Q Another consultant retained by the attorneys	05:42PM	10		
11	working for the State of Oklahoma?		11		
12	A That's correct.		12		
13	Q Okay. Did Dr. -- I'm sorry, did Jim Loftis		13		
14	send you any CD scatter plots that he had run on		14		
15	your principal component analysis?	05:43PM	15		
16	A No, he did not.		16		
17	Q Did Mr. Loftis send you any analysis to the		17		
18	best of your recollection that showed that your		18		
19	principal component analysis was reproducing the		19		
20	data to a high degree?	05:43PM	20		
21	A No. We had verbal discussions on his		21		
22	evaluation of our PCA analysis.		22		
23	Q Well, are you relying upon Mr. Loftis to		23		
24	support the accuracy and reliability of your		24		
25	principal component analysis?	05:43PM	25		
574			576		

71 (Pages 573 to 576)

TULSA FREELANCE REPORTERS
918-587-2878